WHAT IS CLAIMED IS:

1   1.   A method of providing key management comprising:

2   providing a server;

3   providing a client configured to be coupled to said server;

4   providing a trusted third party configured to be coupled to said client;

5   allowing said server to initiate a key management session with said client

1   2.   The method as described in claim 1 wherein said allowing said server to initiate

2   said key management session with said client comprises:

3   generating a trigger message at said server;

4   generating a nonce at said server;

5   conveying said trigger message and said nonce to said client.

1   3.   The method as described in claim 2 and further comprising:

2   receiving said trigger message and said nonce at said client;

3   generating a response message to said trigger message;

4   conveying said response message and a returned_nonce to said server.

1   4.   The method as described in claim 3 and further comprising:

2   predetermining an out-of-bounds value for said nonce to prevent an attacker from

3   simulating a client initiated key management session;

4   checking said nonce to determine whether the value of said nonce is said out-of-

5   bounds value.

1   5.   The method as described in claim 3 and further comprising:

2   confirming the value of said returned_nonce at said server; and

3   conveying a reply message from said client to said server.

1   6.   The method as described in claim 1 and further comprising:

2   receiving from said client a response message and a false_nonce at said server;

3   determining that said false_nonce is false;

4   disregarding said client response message.

1   7.   A method of providing key management in a Kerberos based system, said method

2   comprising:

3   providing a server;

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4   providing a client configured to be coupled to said server;

5   providing a key distribution center configured to act as a trusted third party for

6   said client and said server;

7   initiating a key management session by said server with said client.

1   8.   The method as described in claim 7 and further comprising:

2   generating a trigger message at said server;

3   generating a nonce at said server;

4   conveying said trigger message and said nonce to said client.

1   9.   The method as described in claim 8 and further comprising:

2   receiving said trigger message and said nonce at said client;

3   generating a response message to said trigger message;

4   conveying said response message and a returned_nonce to said server.

1   10.   The method as described in claim 9 and further comprising:

2   confirming the value of said returned_nonce at said server; and then

3   continuing with said key management session.

1   11.   The method as described in claim 7 and further comprising:

2   receiving at said server a response message and a false_nonce from said client;

3   determining that said false_nonce does not match said nonce;

4   determining that said server did not initiate said key management session.

1   12.   A method of initiating a key management session for a cable telephony adapter

2   (CTA. and a Signaling Controller in an IP Telephony network, the method comprising:

3   providing said Signaling Controller;

4   providing said CTA configured to be coupled to said Signaling Controller;

5   providing a key distribution center (KDC.;

6   generating a trigger message at said Signaling Controller;

7   generating a nonce at said Signaling Controller;

8   coupling said nonce with said trigger message;

9   transmitting said nonce coupled with said trigger message to said CTA;

10   generating a response message to said trigger message;

11   using the value of said nonce as the value of a returned_nonce;

12   coupling said response message with said returned_nonce;

13 transmitting said returned_nonce and said response message to said Signaling

14 Controller;

15 comparing said returned_nonce to said nonce;

16 transmitting an AP reply in reply to said response message;

17 transmitting an SA recovered message to said Signalling Controller.

1 13. A method of conveying a key from a server to a client, comprising:

2 generating a wakeup message at said server;

3 generating a server_nonce at said server;

4 conveying said wakeup message and said nonce to said client;

5 generating an AP request message at said client;

6 conveying a client_nonce and said AP request message to said server;

7 confirming that said client_nonce conveyed with said AP request message

8 matches said server_nonce generated at said server;

1 14. A method of confirming that a message received by a server from a client was

2 triggered by the server:

3 receiving an AP request message from said client;

4 receiving a client_nonce from said client wherein said client_nonce is associated

5 with said AP request;

6 determining whether said client_nonce matches a nonce conveyed from said

7 server.

1 15. The method as described in claim 14 and further comprising:

2 determining that said client_nonce does not match said nonce conveyed from said

3 server; and

4 disregarding said AP request.

1 16. The method as described in claim 15 and further comprising:

2 awaiting at said client for a reply from said server to said AP request;

3 aborting said AP request session after a predetermined time period if no reply is

4 received from said server.

1 17. The method as described in claim 14 and further comprising:

2 determining that said client_nonce does match said nonce conveyed from said

3 server; and

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4   generating an AP reply at said server to said AP request.

1   18.   A system for providing key management in a Kerberos based system, said system

2   comprising:

3   a server;

4   a client configured to be coupled to said server;

5   a key distribution center configured to act as a trusted third party for said client

6   and said server;

7   computer code coupled to said server operable to initiate a key management

8   session by said server with said client.

1   19.   The system as described in claim 18 wherein said computer code operable to

2   initiate a key management session comprises computer code operable to generate a trigger

3   message at said server; and further comprising:

4   computer code coupled to said server operable to generate a nonce at said server;

5   computer code coupled to said server operable to convey said trigger message and said

6   nonce to said client.

1   20.   The system as described in claim 19 and further comprising:

2   computer code coupled to said client operable to generate a response message to

3   said trigger message;

4   computer code coupled to said client operable to convey said response message

5   and a returned_nonce to said server.

1   21.   The system as described in claim 20 and further comprising:

2   computer code coupled to said server operable to confirm the value of said

3   returned_nonce at said server.

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